

| L Number | Hits | Search Text | DB | Time stamp |
|----------|---------|---|--------------------|---------------------|
| 1 | 33027 | oligonucleotide or polynucleotide | USPAT; US-PGPUB | 2002/05/22 09:00 |
| 2 | 1313727 | support or array or chip | USPAT; US-PGPUB | 2002/05/22 09:02 |
| 3 | 245115 | (step or cycle or addition) same (dry or drying or dried) | USPAT; US-PGPUB | 2002/05/22 09:04 |
| 4 | 38084 | ((step or cycle or addition) same (dry or drying or dried)) same (argon or nitrogen) | USPAT; US-PGPUB | 2002/05/22 09:04 |
| 5 | 1152 | (oligonucleotide or polynucleotide) and (support or array or chip) and (((step or cycle or addition) same (dry or drying or dried)) same (argon or nitrogen)) | USPAT; US-PGPUB | 2002/05/22 09:04 |
| 6 | 81 | (oligonucleotide or polynucleotide) and (support or array or chip) same (((step or cycle or addition) same (dry or drying or dried)) same (argon or nitrogen)) | USPAT; US-PGPUB | 2002/05/22 09:04 |
| 7 | 0 | ((oligonucleotide or polynucleotide) and (support or array or chip) same (((step or cycle or addition) same (dry or drying or dried)) same (argon or nitrogen))) and photoremov\$ | USPAT; US-PGPUB | 2002/05/22 09:04 |
| 8 | 12 | ((oligonucleotide or polynucleotide) and (support or array or chip) and (((step or cycle or addition) same (dry or drying or dried)) same (argon or nitrogen))) and photoremov\$ | USPAT; US-PGPUB | 2002/05/22 09:05 |

=> s (dry or dried or drying) (8a) (argon or nitrogen)
L1 10369 (DRY OR DRIED OR DRYING) (8A) (ARGON OR NITROGEN)

=> s l1 and oligonucleotide#
L2 5 L1 AND OLIGONUCLEOTIDE#

=> d 1-5 ti

L2 ANSWER 1 OF 5 MEDLINE
TI Inhibitory effects of antisense **oligonucleotides** delivered locally via hydrogel catheter on myointimal hyperplasia of rat carotid artery after **nitrogen drying**.

L2 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2002 ACS
TI Dry biochemical assay plate and method for making the same

L2 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2002 ACS
TI Isolation and detection of analytes from solutions by immunochemical reactions, using magnetic particles bound to silicon wafers and atomic force microscopy

L2 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2002 ACS
TI Preparation of wax beads containing a reagent using liquid nitrogen for cooling and solidifying

L2 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2002 ACS
TI Inhibitory effects of locally delivered antisense **oligonucleotides** on myointimal hyperplasia of rat carotid artery

=> d 2 bib ab

L2 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2002 ACS
AN 1999:439276 CAPLUS
DN 131:56124
TI Dry biochemical assay plate and method for making the same
IN Lichtenwalter, Kay
PA Hewlett-Packard Company, USA
SO U.S., 6 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| PI | US 5922534 | A | 19990713 | US 1995-412498 | 19950328 |
| | US 6255053 | B1 | 20010703 | US 1999-337710 | 19990621 |
| | US 2001046682 | A1 | 20011129 | US 2001-895892 | 20010629 |
| PRAI | US 1995-412498 | A1 | 19950328 | | |
| | US 1999-337710 | A1 | 19990621 | | |

AB An assay plate for detecting the presence of a mobile reactant that binds to a immobilized reactant and the methods of making and using the same. An assay plate according to the present invention includes a substrate and at least one dried aliquot of the immobilized reactant, the immobilized reactant being bound to the surface of the substrate. The immobilized reactant binds the mobile reactant when a soln. contg. the mobile reactant is brought into contact with the immobilized reactant. The mobile and immobilized reactants may be any pair of biol. compds. that have a specific affinity for one another. For example the reactants may be nucleic acids or antibody-antigen pairs. The preferred embodiment of an assay plate according to the present invention includes a plurality of

assay spots, each spot having a different immobilized reactant or concn. thereof. The preferred method for fabricating an assay plate according to the present invention includes the steps of binding the immobilized reactant to the substrate, washing the substrate to remove any immobilized reactant that is not bound to the substrate and then drying the substrate. The dried assay plates are preferably stored in a water-proof container until used. An assay utilizing an assay plate according to the present invention is carried out by bringing a soln. contg. the mobile reactant into contact with the dried aliquot or aliquots on the assay plate. The assay plate is then washed to removed unbound material and the amt. of mobile reactant bound to the washed assay plate detd. In the preferred embodiment of the present invention, the washed assay plate is dried prior to measuring the amt. of mobile reactant bound to the washed assay plate.

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 2 kwic

L2 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2002 ACS

IT Nucleic acids

Oligonucleotides

RL: ANT (Analyte); ANST (Analytical study)

(dry biochem. assay plate and method for making same)

IT 64-17-5, Ethanol, uses 7727-37-9, **Nitrogen**, uses 7732-18-5,
Water, uses

RL: NUU (Other use, unclassified); USES (Uses)

(**dry** biochem. assay plate and method for making same)

=> d his

(FILE 'HOME' ENTERED AT 12:10:38 ON 22 MAY 2002)

FILE 'MEDLINE, BIOSIS, CAPLUS' ENTERED AT 12:11:09 ON 22 MAY 2002

L1 10369 S (DRY OR DRIED OR DRYING) (8A) (ARGON OR NITROGEN)

L2 5 S L1 AND OLIGONUCLEOTIDE#

=> s pitting and array

L3 23 PITTING AND ARRAY

=> s pitting and array#

L4 48 PITTING AND ARRAY#

=> s l4 and oligonucleotide#

L5 0 L4 AND OLIGONUCLEOTIDE#

=> dup rem l4

PROCESSING COMPLETED FOR L4

L6 44 DUP REM L4 (4 DUPLICATES REMOVED)

=> d 1-10 ti

L6 ANSWER 1 OF 44 CAPLUS COPYRIGHT 2002 ACS

TI Using microelectrodes to determine the availability and behavior of pit
initiation sites in aluminum

L6 ANSWER 2 OF 44 CAPLUS COPYRIGHT 2002 ACS

TI Spatial interactions among localized corrosion sites: experiments and
modeling

L6 ANSWER 3 OF 44 MEDLINE

DUPLICATE 1

TI Effect of gamma-irradiation on phenolic compounds and phenylalanine ammonia-lyase activity during storage in relation to peel injury from peel of Citrus clementina hort. Ex. tanaka.

L6 ANSWER 4 OF 44 CAPLUS COPYRIGHT 2002 ACS

TI Interactions among localized corrosion sites investigated with electrode **arrays**

L6 ANSWER 5 OF 44 CAPLUS COPYRIGHT 2002 ACS

TI Substrate surface with patterned pits or microgrooves for interlocking adhesion of electroless metal coating

L6 ANSWER 6 OF 44 CAPLUS COPYRIGHT 2002 ACS

TI The influence of nanoengineered Cu defects on aluminum **pitting** initiation

L6 ANSWER 7 OF 44 CAPLUS COPYRIGHT 2002 ACS

TI The use of microelectrode **arrays** to study copper **pitting** in potable water

L6 ANSWER 8 OF 44 CAPLUS COPYRIGHT 2002 ACS

TI Interactions among localized corrosion sites investigated with electrode **arrays**

L6 ANSWER 9 OF 44 CAPLUS COPYRIGHT 2002 ACS

TI Relaxation and surface morphology of heteroepitaxial layers grown on vicinal plane substrates

L6 ANSWER 10 OF 44 CAPLUS COPYRIGHT 2002 ACS

TI Crevice corrosion initiation at engineered Cu-rich defects in Al thin films

=> d 11-44 ti

L6 ANSWER 11 OF 44 MEDLINE DUPLICATE 2

TI In situ fluorescence imaging of localized corrosion with a pH-sensitive imaging fiber.

L6 ANSWER 12 OF 44 CAPLUS COPYRIGHT 2002 ACS

TI Corrosion monitoring with electrochemical sensors by evolution-inspired optimization techniques

L6 ANSWER 13 OF 44 CAPLUS COPYRIGHT 2002 ACS

TI Studies of mass transfer during electroforming of LIGA microstructures

L6 ANSWER 14 OF 44 CAPLUS COPYRIGHT 2002 ACS

TI Manufacture of cold-rolled metal sheet using a tandem mill equipped with textured rolls

L6 ANSWER 15 OF 44 CAPLUS COPYRIGHT 2002 ACS

TI Local chemistry considerations in the tunnelling corrosion of aluminum

L6 ANSWER 16 OF 44 CAPLUS COPYRIGHT 2002 ACS

TI Manufacture of integrated semiconductor memory device

L6 ANSWER 17 OF 44 CAPLUS COPYRIGHT 2002 ACS

TI **Pitting** corrosion of aluminum and aluminum-copper bicrystals

L6 ANSWER 18 OF 44 CAPLUS COPYRIGHT 2002 ACS

TI Thermal etching of platinum crystals in air, hydrogen, and oxygen - some STM (scanning tunneling microscope) observations

L6 ANSWER 19 OF 44 CAPLUS COPYRIGHT 2002 ACS
 TI Initiation of single corrosion pits on pure aluminum by focused laser radiation

L6 ANSWER 20 OF 44 CAPLUS COPYRIGHT 2002 ACS
 TI The electrochemical mechanism in the erosion-corrosion damage of carbon steel by gas-liquid two-phase flow

L6 ANSWER 21 OF 44 MEDLINE DUPLICATE 3
 TI Corneal dystrophy in Fischer 344 rats.

L6 ANSWER 22 OF 44 CAPLUS COPYRIGHT 2002 ACS
 TI Pit nucleation originated by coupling of perturbations with local anodic sites on passive metals

L6 ANSWER 23 OF 44 CAPLUS COPYRIGHT 2002 ACS
 TI Localized corrosion monitoring

L6 ANSWER 24 OF 44 CAPLUS COPYRIGHT 2002 ACS
 TI Organic chemistry at chemically resistant polymer surfaces

L6 ANSWER 25 OF 44 CAPLUS COPYRIGHT 2002 ACS
 TI Dislocation **arrays** and the Bauschinger effect in copper-9 at.% aluminum bicrystals

L6 ANSWER 26 OF 44 CAPLUS COPYRIGHT 2002 ACS
 TI Chemomechanical effect in ion-implanted magnesium oxide

L6 ANSWER 27 OF 44 CAPLUS COPYRIGHT 2002 ACS
 TI Exfoliation corrosion of aluminum-magnesium-silicon alloys in water

L6 ANSWER 28 OF 44 CAPLUS COPYRIGHT 2002 ACS
 TI Dislocation generation and displacement in single crystals of a copper-10.5 at. % aluminum alloy deformed in bending

L6 ANSWER 29 OF 44 CAPLUS COPYRIGHT 2002 ACS
 TI Electrolytic etching techniques of aluminum strip for lithographic printing plates

L6 ANSWER 30 OF 44 CAPLUS COPYRIGHT 2002 ACS
 TI A high volume cost efficient production macrostructuring process [for silicon solar cells]

L6 ANSWER 31 OF 44 CAPLUS COPYRIGHT 2002 ACS
 TI Dislocation etch pits in gold

L6 ANSWER 32 OF 44 CAPLUS COPYRIGHT 2002 ACS
 TI Effect of the deformation of steel 1Kh18N10T on **pitting** formation

L6 ANSWER 33 OF 44 CAPLUS COPYRIGHT 2002 ACS
 TI Effects of pressurization on the microstructure and mechanical properties of magnesium oxide

L6 ANSWER 34 OF 44 CAPLUS COPYRIGHT 2002 ACS
 TI Dislocation arrangements resulting from the diffusion of zinc into copper. Electron microscopy

L6 ANSWER 35 OF 44 CAPLUS COPYRIGHT 2002 ACS
 TI Dislocations in deformed copper-nickel single crystals

L6 ANSWER 36 OF 44 CAPLUS COPYRIGHT 2002 ACS
 TI Domain wall dislocation interactions in rubidium trifluoroferrate(II)

L6 ANSWER 37 OF 44 CAPLUS COPYRIGHT 2002 ACS
 TI Dislocations in RbFeF3

L6 ANSWER 38 OF 44 CAPLUS COPYRIGHT 2002 ACS
 TI Dislocation **arrays** in deformed silicon-iron bicrystals

L6 ANSWER 39 OF 44 CAPLUS COPYRIGHT 2002 ACS
 TI Microtopology of stress corrosion cracking

L6 ANSWER 40 OF 44 CAPLUS COPYRIGHT 2002 ACS
 TI Dislocation distributions during stage I deformation of silver single crystals

L6 ANSWER 41 OF 44 CAPLUS COPYRIGHT 2002 ACS
 TI Yttrium aluminum garnet single crystals: polishing, etching, and dislocation distribution

L6 ANSWER 42 OF 44 CAPLUS COPYRIGHT 2002 ACS
 TI Initial stages of stress corrosion cracking in austenitic stainless steels

L6 ANSWER 43 OF 44 CAPLUS COPYRIGHT 2002 ACS
 TI Observations of dislocations and surface features in corundum crystals by electron transmission microscopy

L6 ANSWER 44 OF 44 CAPLUS COPYRIGHT 2002 ACS
 TI Direct transmission electron microscopy of zirconium

=> s (chip or array) and argon
 L7 634 (CHIP OR ARRAY) AND ARGON

=> s 17 and oligonucleotide#
 L8 5 L7 AND OLIGONUCLEOTIDE#

=> d 1-5 ti

L8 ANSWER 1 OF 5 MEDLINE
 TI DNA microarray analyses of genes elicited by ultrasound in human U937 cells.

L8 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2002 ACS
 TI Method for photolytically deprotecting immobilized nucleoside derivatives, especially in the production of DNA chips

L8 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2002 ACS
 TI Automated electrophoresis and fluorescence detection apparatus and method

L8 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2002 ACS
 TI Attachment of unmodified nucleic acids to silanized solid phase for nucleic acid assay

L8 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2002 ACS
 TI Multi-**array**, multi-specific electrochemiluminescent testing

=> d 4 bib ab

L8 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2002 ACS
 AN 1998:806760 CAPLUS

DN 130:48288
 TI Attachment of unmodified nucleic acids to silanized solid phase for
 nucleic acid assay
 IN Shi, Jufang; Boyce-Jacino, Michael T.
 PA Molecular Tool, Inc., USA
 SO PCT Int. Appl., 39 pp.
 CODEN: PIXXD2

DT Patent
 LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 9855593 | A1 | 19981210 | WO 1998-US11662 | 19980605 |
| | W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | US 5919626 | A | 19990706 | US 1997-870010 | 19970606 |
| | AU 9877260 | A1 | 19981221 | AU 1998-77260 | 19980605 |
| | AU 739412 | B2 | 20011011 | | |
| | EP 996705 | A1 | 20000503 | EP 1998-925267 | 19980605 |
| | R: CH, DE, FR, GB, LI | | | | |
| | JP 2002506347 | T2 | 20020226 | JP 1999-502940 | 19980605 |
| | US 6136962 | A | 20001024 | US 1998-102371 | 19980623 |
| | US 6387626 | B1 | 20020514 | US 2000-638436 | 20000814 |
| PRAI | US 1997-870010 | A | 19970606 | | |
| | WO 1998-US11662 | W | 19980605 | | |
| | US 1998-102371 | A1 | 19980623 | | |
| AB | Described is a simple, cost effective method for immobilizing synthetic, unmodified nucleic acid mols. onto a silane-coated solid support via covalent linkage. The highly hydrophobic silanized surface that allows oligonucleotide probe droplets to form at specific and localized positions on the solid surface, which is suitable for automated and scaled-up process for DNA array prepn. Also claimed are methods for (1) prepn. of the surface by coating with a mercapto-alkyl-trimethoxysilane or glycidoxy-alkyl-silane and curing of the coating in a dry inert gas such as Ar or N2 at 60-70.degree. for 10-14 h; and (2) coupling of unmodified nucleic acids via ether or thioether linkage in an alk. soln. The invention further concerns the use of such immobilized mols. in nucleic acid hybridization assays, sequencing by hybridization assays, and genetic analyses and combinatorial analyses involving nucleic acids or proteins for screening applications. | | | | |